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VERIZON
PATENT MANAGEMENT GROUP
1320 North Court House Road
9th Floor
ARLINGTON, VA 22201-2909

EXAMINER
MOORE, IAN N

ART UNIT	PAPER NUMBER
2463	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

		Application No.	Applicant(s)
Office Action Summary		09/766,943	GALLANT ET AL.
		Examiner	Art Unit	
		IAN N. MOORE	2463	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>21 August 2009</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-39,42-50 and 54-81</u> is/are pending in the application.

     4a) Of the above claim(s) <u>66-81</u> is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-39,42-50 and 54-65</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail. Date _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

This instant action <u>*replaced*</u> *the non-final action mailed on 10/28/09 since the previously*

mailed non-final action contains typo graphical errors. <u>*Examiner hereby requests the*</u>

<u>*applicant to disregard the previous action (mailed on 10/28/09), and consider this instant*</u>

<u>*action*</u>.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114 was filed in this application

after a decision by the Board of Patent Appeals and Interferences, but before the filing of a

Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil

action. Since this application is eligible for continued examination under 37 CFR 1.114 and the

fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to

37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 8/21/09 has been entered.

Response to Arguments

2.   Applicant's arguments with respect to the **amended claims** have been considered but are

moot in view of the new ground(s) of rejection.

3.   Applicant's arguments filed 8/21/09, regarding non-amended claims (i.e. original claims)

have been fully considered but they are not persuasive since the **Board of Patent Appeals and**

Interferences already affirmed the examiner rejections as proper (see BAPI decision

(mailed date 7/1/09). Thus, examiner sustained the rejections.

Priority

4.   Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or

under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or

more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as

follows:

The later-filed application must be an application for a patent for an invention which is

also disclosed in the prior application (the parent or original nonprovisional application or

provisional application). The disclosure of the invention in the parent application and in the later-

filed application must be sufficient to comply with the requirements of the first paragraph of 35

U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32

USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, provisional Application No. 60/176,928,

fails to provide adequate support or enablement in the manner provided by the first paragraph of

35 U.S.C. 112 for claims **1-39, 42-50, 54-65** of this application. The disclosure of the prior-filed

application, provisional Application No. 60/176,928 series of feature requirement for Multiple

Service Control Point (MSCP) system where

- the first document FAST MSCP feature requirement specification Re. 3.2 discloses

  authorization, data elements, activation, invocation, normal processing, reporting

  requirements and feature interactions,

- the second document discloses transaction detail records Rel 3.2.0,

- the third document disclose data schema requirement for call processing control Rel. 3.2, ,

- the fourth document discloses service administration interface Rel. 3.2,

- fifth document discloses message and parameter specification Rel. 3.0.6

- Sixth document discloses call flows Rel. 3.0,

- Seventh document discloses network management requirement Rel. 3.0

- eighth document discloses voice and telephony over ATM IWF

- Ninth document discloses frame rely customer PVC reconfiguration

- Tenth document discloses ATM signaling intercept processor with the GUI user guide to
  MCI WorldCOM computer system.

These documents in provisional Application No. 60/176,928, mainly discloses generic
specification of MSCP system that may relate to the field of invention, but there is no specific
disclosure or clear evidence in these documents, "individually or in-combination", that provide
adequately support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112
for the claims **1-39, 42-50, 54-65** of this instant application.

If applicant were to disagree, it is suggest providing each document name, number, page
number and paragraph number of the document with the corresponding claim number.

Specification

5.   The disclosure is objected to because of the following informalities: the status of a parent

reference U.S. applications (09/768068, 09/768077, 09/767476, 09/768069, 09/768070) recited

in page 2, line 18 must be updated as "**now issued as U.S. Patent**" or "**now abandoned**", and it

is also suggested to remove all attorney docket numbers for these U.S. applications since they

now have the corresponding U.S. application numbers and/or patent numbers, respectively.

Appropriate correction is required.

6.   The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 39 recites, "a computer readable medium" in line 1. However, the specification fails to provide intrinsic definition/embodiment of what a computer readable medium is.

Claim Objections

7.   Claims 1, 6-14, 19, 22, 23, 27, 30, 31, 38 are objected to because of the following informalities:

Claim 1 recites, both "the signaling message" and "said signaling message" as a antecedent basis for "a signaling message". For clarity and consistency, it is suggested to use either "the signaling message" or "said signaling message".

Claims 7, 14 are also objected for the same reason as claim 1.

Claim 6 recites "a policy condition" in line 5, and independent claim 1 also recites "a policy condition". For clarity and consistency, it is suggested to clarify whether they are the same policy or different. *For the purpose of the examination, it will be assumed as "the same policy".*

Claims 7, 8, 9, 10, 11, 12, 13, 14, 19, 22, 23, 27, 30, 31, 38, are also objected for the same reason as claim 6.

Claim 6 recites, "**the** condition" line 9, and claim 6 recites "a policy condition" in line 5, and independent claim 1 also recites "a policy condition". For clarity and consistency, it is suggested to clarify whether the condition refers to "a policy condition" in claim 6 or claim 1.

For the purpose of the examination, it will assume that "the condition" refers to a condition in

claim 6.

 Claims 7, 8, 9, 10, 11, 12, 13, 19, 22, 23, 27, 30, 31, 38 are also objected for the same

reason as claim 6.

 Due to the large number of claims, examiner is hereby requesting the applicant to

correct similar minor informalities set fort above for claims 39, 42-50, 54-65.

 Appropriate correction is required.

Double Patenting

 The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent possible
harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection
is appropriate where the conflicting claims are not identical, but at least one examined
application claim is not patentably distinct from the reference claim(s) because the examined
application claim is either anticipated by, or would have been obvious over, the reference
claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re
Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225
USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re
Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).
 A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may
be used to overcome an actual or provisional rejection based on a nonstatutory double patenting
ground provided the conflicting application or patent either is shown to be commonly owned
with this application, or claims an invention made as a result of activities undertaken within the
scope of a joint research agreement.
 Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR
3.73(b).

8.   Claim 14 is rejected on the ground of nonstatutory obviousness-type double patenting as

being unpatentable over claims 1-4 of U.S. Patent No. 7,283,512 (hereinafter refers to as

Hall'512) in view of Buyukkoc.

Although the conflicting claims are not identical, they are not patentably distinct from

each other because claim 14 of the instant application is the same scope of the claims 1-4 of the

Patent by adding the well-known elements and functions as set forth below.

Regarding claim 14 of the instant application, Hall'512 discloses Asynchronous

Transfer Mode (ATM) network for effectuating intelligent policy features with respect to a call

to be established between two parties via a virtual channel connection a calling party and a called

party (see claim 1), comprising:

an ATM switch serving a customer premises equipment (CPE) operated by a the calling

party (see claim 1);

a signaling intercept processor associated with said ATM switch the signaling intercept

processor to for intercepting intercept a signaling message relative to said call (see claim 1); and

a policy server associated with said signaling intercept processor, the policy profile

database storing entries that relate subscribers to policies, where each policy identifies one or

more policy features, a plurality of policy features, with which the related subscriber is

associated with a subscriber (see claim 1, 2), wherein where said policy server is to:

determine that a policy in the policy profile database is to be enforced for the calling

party (see claim 1-4),

execute appropriate service logic for each policy feature of the one or more policy

features identified by the policy for the calling party (see claim 1-4), and

determine whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied with respect to said

signaling message, a connection path being established when the policy condition for each policy

feature, of the one or more policy features identified by the policy for the calling party, is

determined to be satisfied (see claim 1-4).

Hall'512 does not explicitly disclose *"said policy server being associated with a policy*

profile database".

However, Buyukkoc discloses an Asynchronous Transfer Mode (ATM) network (see

FIG. 7-9, ATM network; see col. 19, line 55-60) for effectuating intelligent policy features with

respect to a call to be established <u>between a calling party and a called party</u> (**see FIG. 9, a**

connection user 904 and 902; see col. 19, line 61 to col. 20, line 24), comprising:

an ATM switch (see FIG. 9, ATM switch 922) serving a customer premises equipment

(CPE) operated <u>by the calling party</u> (see FIG. 9, CPE User 902 connects TDM switch 912; see

col. 19, line 64 to col. 20, line 25);

a signaling intercept processor (see FIG. 7, Regional RSD server, RRSD, 740; see col.

13, line 22-46) associated with said ATM switch, <u>the signaling intercept processor to intercept</u> a

signaling message relative to said call (**see col. 47 to col. 14, line 5; see FIG. 8, step 820; see**

col. 19, line 25-30; edge node send a call query/message to RSD, thus RSD intercept/capture

the call query/message; also see FIG. 10, step 1035);

a policy server (see FIG. 7, central RDS server 730, i.e., Signaling Control Point, SCP)

associated with said signaling intercept processor, said policy server <u>being associated with a</u>

<u>policy profile database (</u>**Tables VII-IX, RSD associated with a database**<u>), the policy profile</u>

database storing entries that relate subscriber to policies (**see col. 14, line 9 to col. 15, line 50;**

see col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; RSD stores contents

consists call/connection rules/policies (e.g. features/description includes connectively

information, threshold, quality of service, capacity, and/or status of loading/congestion),

where a call is associated with a user/subscriber since the user/subscriber is the one making

the call/connect), where each policy defines one more policy features of a group of policy

features with which the related subscriber is associated (**see col. 14, line 35-64; each rule/policy**

defines/describes the descriptions/features of connectively information, threshold, quality

of service, capacity, and/or status of loading/congestion (i.e. a policy/rule for a quality of

service feature/description of a group of features/descriptions connectively information,

threshold, quality of service, capacity, and/or status of loading/congestion; a policy/rule for

loading/congestion feature/description of a group of features/descriptions connectively

information, threshold, quality of service, capacity, and/or status of loading/congestion)

associated with a call/connection for the user/subscriber) where said policy server is to;

wherein said policy server operates to effectuate a particular policy feature of the

plurality of policy feature with respect to said call when triggered by said signaling message

received from said signaling intercept processor (see FIG. 8, step 840; see FIG. 10, steps

1035,1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40; see col. 21, line

19-30; RSD determines/decides whether a particular/specific quality-of-service rule/policy of the

load/congestion/priority/bandwidth/route/quality-of-service condition of a new call/connection is

met/fulfilled when receiving setup message from a user (via RRSD)).

determining that a policy in the policy profile database is to be enforced for the calling

party (see FIG. 8, step 840; see FIG. 10, steps 1035,1040; see col. 17, line 25 to col. 18, line

45; see col. 13, line 1-7, 64 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line 1-16; see

col. 13, line 1-6, 29-67; Tables VII-IX; according to a new call in the RSD database tables,

deciding/determining **a specific rule/policy to trigger/apply to received call's priority of**

traffic);

execute for each policy feature of the one or more policy features identified by the policy

for the calling party (**FIG. 8, step 840; see FIG. 10, steps 1035,1040; see col. 17, line 25 to col.**

18, line 45; see col. 13, line 1-7, 64 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line

1-16; see col. 13, line 1-6, 29-67; according to a new call, processing/executing in RSD for

each status/feature (i.e. connectively information, threshold, quality of service, capacity, or

status of loading/congestion) of a group of status/feature/priority (i.e. connectively

information, threshold, quality of service, capacity, and status of loading/congestion)

identify/recognized by the rule/policy associated with a call/connection for the

user/subscriber);

determine whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied with respect to said

signaling message (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64

to col. 14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; **determines/decides whether**

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with

connectively information, threshold, quality of service, capacity, or status of

loading/congestion, identified/recognized by the rule/policy associated with a

call/connection for the user/subscriber is met/fulfilled according to a new call/connection

(i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions));

a connection path being established when the policy condition for each policy feature, of

the one or more policy features identified by the policy for the calling party, is determined to be

satisfied (see **FIG. 8, step 850, 860, 870; see FIG. 10, steps 1045, 1050, 1055; see col. 14, line**

1-65; see col. 19, line 35-50; see col. 21, line 40-50; setting/establishing the call/connection

when load/congestion/priority/bandwidth/routes conditions/status (i.e. **connectively**

information, threshold, quality of service, capacity, or status of loading/congestion) are

met/fulfilled for each policy/rule status/feature identified/recognized by the user/subscriber

policy).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide *"said policy server being associated with a policy profile*

database", as taught by Buyukkoc in the system of Hall'512, so that it would provide efficient

means by which capacity in the network is more fully shared without adversely affecting call set

up operations; see Buyukkoc col. 2, line 9-25.

Moreover, the doctrine of double patenting seeks to prevent the unjustified extension of

patent exclusivity beyond the term of a patent.

Claim Rejections - 35 USC § 101

9.   35 U.S.C. 101 reads as follows:

   Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
   any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
   requirements of this title.

10.   **Claims 39, 42-50, 54-65** are rejected under 35 U.S.C. 101 because the claimed invention

is directed to non-statutory subject matter since it fails to be limited to embodiments which fall

within a statutory category.

    Claim 39 recites, "a **computer readable medium** operable with an Asynchrous Transfer

Mode (ATM) network node, said computer-readable medium carrying a sequence of instructions

provided for executing logic which, when executed by a processing entity…" in line 1-3.

    It is noted that applicant <u>fails to provide</u> antecedent basis for the claim terminology

"computer readable medium" intended to be covered within the meaning in the disclosure. Since

the applicant fails to provide antecedent basic to limit the specific statutory embodiments,

"computer readable medium" belongs to the intrinsic non-statutory embodiments of transitory

medium such as a carrier signal, radio wave, light wave, and transmission medium/media.

    Transitory transmission media in the context of this disclosure cover "***carrier signal,***

radio wave, light wave, transmission medium/media", which are not a Manufacture within the

meaning of 101, and electrical connections, optical coaxial cables, copper wire and fiber optics

fibers, on which the program is still unavailable to the processor. In such embodiments, the

program is still unable to act as a computer component and have its functionality realized. Thus,

claims that recite nothing but the physical characteristics of a form of energy, such as a

frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and

as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Thus, the

claim is also non-statutory.

    In view of the above analysis, claim 39 is ineligible for patent protection as failing to be

limited to embodiments which fall within a statutory category.

Claims 42-50 and 54-65 are also rejected since they are depended upon rejection claim 39

set forth above.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claim 1-3, 5, 11, 12, 14-16, 18, 31, 39, 42, 43, 45, and 58 are rejected under 35 U.S.C.

103(a) as being unpatentable over Buyukkoc (US 6.463.062) in view of Gai (US006167445A).

Regarding claim 1, Buyukkoc discloses a method in an synchronous Transfer Mode

(ATM) network (see FIG. 7-9, a method performed by central Routing Status Database server,

RDS in ATM network; see col. 19, line 55-60) having an ingress switch (see FIG. 9, ATM

switch 922) and an egress switch (see FIG. 9, ATM switch 924), wherein said ingress switch

serves an ingress device (see FIG. 9, switch 912) operated by a calling party (see FIG. 9, User

902) and said egress switch serves an egress device (see FIG. 9, Switch 914) operated by a called

party (see FIG. 9, user 904); see col. 19, line 61 to col. 20, line 24), the method comprising:

receiving, in said ingress switch, a signaling message from said ingress device (see FIG.

9, step 810, edge node receive a new call; see col. 19, line 19-26; also see FIG. 10, step

1005,1010,1015,1020,1025,1030; see col. 20, line 50-67);

providing said signaling message to a signaling intercept processor (see FIG. 7, a link 750

to Regional RSD server, RRSD, 740; see col. 13, line 22-46) associated with said ingress switch

(see col. 47 to col. 14, line 5; see FIG. 8, step 820; see col. 19, line 25-30; edge node send a call

query/message to RSD; also see FIG. 10, step 1035);

propagating said signaling message from the signaling intercept processor to a policy

server **(see FIG. 7, from regional RSD 740 (RRSD) via a link 770 to central RDS server 730,**

i.e., Signaling Control Point, SCP), said policy server being associated with a policy profile

database (**Tables VII-IX, RSD associated with a database**), the policy profile database storing

entries that relate subscriber to policies (**see col. 14, line 9 to col. 15, line 50; see col. 10, line**

10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; RSD stores contents consists

call/connection rules/policies (e.g. features/description includes connectively information,

threshold, quality of service, capacity, and/or status of loading/congestion), where a call is

associated with a user/subscriber since the user/subscriber is the one making the

call/connect), where each policy defines one more policy features of a group of policy features

with which the related subscriber is associated (**see col. 14, line 35-64; each rule/policy**

defines/describes the descriptions/features of connectively information, threshold, quality

of service, capacity, and/or status of loading/congestion (i.e. a policy/rule for a quality of

service feature/description of a group of features/descriptions connectively information,

threshold, quality of service, capacity, and/or status of loading/congestion; a policy/rule for

loading/congestion feature/description of a group of features/descriptions connectively

information, threshold, quality of service, capacity, and/or status of loading/congestion)

associated with a call/connection for the user/subscriber);

Identifying in the policy profile database and based on the signaling message, a policy for

the calling party (**see col. 17, line 25 to col. 18, line 45; see col. 14, line 9 to col. 15, line 50; see**

col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; according to a new call,

recognizing/identifying a specific rule/policy in the RSD rule/policy database tables VII-

IX);

determining, in the policy server and based on the signaling message, that the policy for

the calling party is to be enforced (see FIG. 8, step 840; see FIG. 10, steps 1035,1040; see col.

17, line 25 to col. 18, line 45; see col. 13, line 1-7, 64 to col. 15, line 50; see col. 10, line 10-20;

see col. 11, line 1-16; see col. 13, line 1-6, 29-67; Tables VII-IX; according to a new call in the

RSD database tables, deciding/determining a specific rule/policy to trigger/apply to received

call's priority of traffic);

executing, in said policy server and based on said signaling message for each policy

feature of the one or more policy features identified by the policy for the calling party (FIG. 8,

step 840; see FIG. 10, steps 1035,1040; see col. 17, line 25 to col. 18, line 45; see col. 13, line

1-7, 64 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-

67; according to a new call, processing/executing in RSD for each status/feature (i.e.

connectively information, threshold, quality of service, capacity, or status of

loading/congestion) of a group of status/feature/priority (i.e. connectively information,

threshold, quality of service, capacity, and status of loading/congestion) identify/recognized

by the rule/policy associated with a call/connection for the user/subscriber);

determining whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied with respect to said

signaling message (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64

to col. 14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with

connectively information, threshold, quality of service, capacity, or status of

loading/congestion, identified/recognized by the rule/policy associated with a

call/connection for the user/subscriber is met/fulfilled according to a new call/connection

(i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions));

establishing a connection path between said ingress switch and said egress switch based

on said determination that said policy condition is satisfied <u>for each policy feature, of the one or</u>

<u>more policy features identified by the policy for the calling party</u> (see FIG. 8, step 850, 860, 870;

see FIG. 10, steps 1045, 1050, 1055; see col. 14, line 1-65; see col. 19, line 35-50; see col. 21,

line 40-50; setting/establishing the call/connection when

load/congestion/priority/bandwidth/routes conditions/status (i.e. **connectively information,**

threshold, quality of service, capacity, or status of loading/congestion) are met/fulfilled for

each policy/rule **status/feature identified/recognized by the user/subscriber policy).**

Although Buyukkoc discloses executing in said policy server for each policy feature of

the one or more policy features identified by the policy for the calling party as set forth above,

Buyukkoc does not explicitly disclose "*appropriate service logic*".

However, Gai teaches said policy server (see FIG. 4, policy server 322) being associated

with a policy profile database (see FIG. 4, a combined system of database policy rule 414, policy

translator, repository 326 and device-specific filtering entity 416), the policy profile database

storing entries that relate subscriber to policies (see FIG. 4, stores data related to user policies;

see col. 13, line 61 to col. 14, line 5), where each policy defines one more policy features of a

group of policy features with which the related subscriber is associated (see FIG. 4, each policy

defines rules/policy features for a group of policy features (e.g. source address screening,

Destination address screening features) for each user; see col. 14, line 1-15, 56 to col. 15, line

55);

identifying, in the policy profile database, a policy for the calling party (see FIG. 4,

identifying/recognizing the policy for a calling user in the combined database system; see col.

13, line 60 and col. 18, line 65);

Determining, in the policy server and that the policy for the calling party is to enforced

(see FIG. 4, determining the policy for the caller/user is to be managed/restricted/enforced in the

policy server 322; see col. 13, line 60 and col. 18, line 65);;

executing in said policy server appropriate service logic for each policy feature of the one

ore more policy feature identified by the policy of the calling party (see FIG. 4,

executing/processing specific engine/logic for each policy feature identified by the policy of

caller/user; see col. 13, line 60 and col. 18, line 65);

determining, whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied (see FIG. 4,

determining if a policy condition/status related/associated with each policy/rule feature

identified/recognized by the policy/rule for the caller/user is accepted/satisfied; see col. 13, line

60 and col. 18, line 65);

establishing the connection path based on said determination that said policy condition is

satisfied for each policy feature, of the one or more policy features identified by the policy for

the calling party (see FIG. 4, establishing a connection/communication base on determination

that policy/rule status/condition is satisfied/meet for the policy/rule feature identified/recognized

by the policy of the caller/user; see col. 13, line 60 and col. 18, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "*appropriate service logic*", as taught by Gai in the system of

Buyukkoc, so that it would ability to allocate network services and resources by applying high-

level quality of service policies; see Gai col. 5, line 45-55.

Regarding claim 14, Buyukkoc discloses an Asynchronous Transfer Mode (ATM)

network (see FIG. 7-9, ATM network; see col. 19, line 55-60) for effectuating intelligent policy

features with respect to a call to be established between a calling party and a called party (**see**

FIG. 9, a connection user 904 and 902; see col. 19, line 61 to col. 20, line 24), comprising:

an ATM switch (see FIG. 9, ATM switch 922) serving a customer premises equipment

(CPE) operated by the calling party (see FIG. 9, CPE User 902 connects TDM switch 912; see

col. 19, line 64 to col. 20, line 25);

a signaling intercept processor (see FIG. 7, Regional RSD server, RRSD, 740; see col.

13, line 22-46) associated with said ATM switch, the signaling intercept processor to intercept a

signaling message relative to said call (**see col. 47 to col. 14, line 5; see FIG. 8, step 820; see**

col. 19, line 25-30; edge node send a call query/message to RSD, thus RSD intercept/capture

the call query/message; also see FIG. 10, step 1035);

a policy server (see FIG. 7, central RDS server 730, i.e., Signaling Control Point, SCP)

associated with said signaling intercept processor, said policy server being associated with a

policy profile database (**Tables VII-IX, RSD associated with a database**), the policy profile

database storing entries that relate subscriber to policies (**see col. 14, line 9 to col. 15, line 50;**

see col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; RSD stores contents

consists call/connection rules/policies (e.g. features/description includes connectively

information, threshold, quality of service, capacity, and/or status of loading/congestion),

where a call is associated with a user/subscriber since the user/subscriber is the one making

the call/connect), where each policy defines one more policy features of a group of policy

features with which the related subscriber is associated (**see col. 14, line 35-64; each rule/policy**

defines/describes the descriptions/features of connectively information, threshold, quality

of service, capacity, and/or status of loading/congestion (i.e. a policy/rule for a quality of

service feature/description of a group of features/descriptions connectively information,

threshold, quality of service, capacity, and/or status of loading/congestion; a policy/rule for

loading/congestion feature/description of a group of features/descriptions connectively

information, threshold, quality of service, capacity, and/or status of loading/congestion)

associated with a call/connection for the user/subscriber) where said policy server is to;

      wherein said policy server operates to effectuate a particular policy feature of the

plurality of policy feature with respect to said call when triggered by said signaling message

received from said signaling intercept processor (see FIG. 8, step 840; see FIG. 10, steps

1035,1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40; see col. 21, line

19-30; RSD determines/decides whether a particular/specific quality-of-service rule/policy of the

load/congestion/priority/bandwidth/route/quality-of-service condition of a new call/connection is

met/fulfilled when receiving setup message from a user (via RRSD)).

      determining that a policy in the policy profile database is to be enforced for the calling

party (**see FIG. 8, step 840; see FIG. 10, steps 1035,1040; see col. 17, line 25 to col. 18, line**

45; see col. 13, line 1-7, 64 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line 1-16; see

col. 13, line 1-6, 29-67; Tables VII-IX; according to a new call in the RSD database tables,

deciding/determining **a specific rule/policy to trigger/apply to received call's priority of**

traffic);

execute for each policy feature of the one or more policy features identified by the policy

for the calling party (**FIG. 8, step 840; see FIG. 10, steps 1035,1040; see col. 17, line 25 to col.**

18, line 45; see col. 13, line 1-7, 64 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line

1-16; see col. 13, line 1-6, 29-67; according to a new call, processing/executing in RSD for

each status/feature (i.e. connectively information, threshold, quality of service, capacity, or

status of loading/congestion) of a group of status/feature/priority (i.e. connectively

information, threshold, quality of service, capacity, and status of loading/congestion)

identify/recognized by the rule/policy associated with a call/connection for the

user/subscriber);

determine whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied with respect to said

signaling message (**see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64**

to col. 14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with

connectively information, threshold, quality of service, capacity, or status of

loading/congestion, identified/recognized by the rule/policy associated with a

call/connection for the user/subscriber is met/fulfilled according to a new call/connection

(i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions));

a connection path being established when the policy condition for each policy feature, of the one or more policy features identified by the policy for the calling party, is determined to be satisfied (see **FIG. 8, step 850, 860, 870; see FIG. 10, steps 1045, 1050, 1055; see col. 14, line 1-65; see col. 19, line 35-50; see col. 21, line 40-50; setting/establishing the call/connection when load/congestion/priority/bandwidth/routes conditions/status** (i.e. **connectively information, threshold, quality of service, capacity, or status of loading/congestion) are met/fulfilled for each policy/rule status/feature identified/recognized by the user/subscriber policy).**

Although Buyukkoc discloses executing in said policy server for each policy feature of the one or more policy features identified by the policy for the calling party as set forth above,

Buyukkoc does not explicitly disclose "*appropriate service logic*".

However, Gai teaches said policy server (see FIG. 4, policy server 322) being associated with said intercept processor, said policy server being associated with a policy profile database (see FIG. 4, a combined system of database policy rule 414, policy translator, repository 326 and device-specific filtering entity 416), the policy profile database storing entries that relate subscriber to policies (see FIG. 4, stores data related to user policies; see col. 13, line 61 to col. 14, line 5), where each policy defines one more policy features of a group of policy features with which the related subscriber is associated (see FIG. 4, each policy defines rules/policy features for a group of policy features (e.g. source address screening, Destination address screening features) for each user; see col. 14, line 1-15, 56 to col. 15, line 55) where said policy server is to:

determine that a policy in the policy profile database is to be enforced for the calling

party (see FIG. 4, determining a policy for the caller/user in the combined database system is to

be managed/restricted/enforced for caller user; see col. 13, line 60 and col. 18, line 65);

execute in said policy server appropriate service logic for each policy feature of the one

ore more policy feature identified by the policy of the calling party (see FIG. 4,

executing/processing specific engine/logic for each policy feature identified by the policy of

caller/user; see col. 13, line 60 and col. 18, line 65);

determining, whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied (see FIG. 4,

determining if a policy condition/status related/associated with each policy/rule feature

identified/recognized by the policy/rule for the caller/user is accepted/satisfied; see col. 13, line

60 and col. 18, line 65);

a connection path being established when the policy condition for each policy feature, of

the one or more policy features identified by the policy for the calling party is determined to be

satisfied (see FIG. 4, establishing a connection/communication base on determination that

policy/rule status/condition is satisfied/meet for the policy/rule feature identified/recognized by

the policy of the caller/user; see col. 13, line 60 and col. 18, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "*appropriate service logic*", as taught by Gai in the system of

Buyukkoc, so that it would ability to allocate network services and resources by applying high-

level quality of service policies; see Gai col. 5, line 45-55.

Regarding claim 39, Buyukkoc discloses a computer-readable medium operable with an

Asynchronous Transfer Mode (ATM) network node (see FIG. 9, ATM switch 922,924 with

memory 1104; see col. 22, line 12-40), said computer-readable medium carrying a sequence of

instructions provided for executing service logic which, when executed by a processing entity

associated with said ATM network node, (see FIG. 11, see col. 22, line 12-40) causes said ATM

network node to perform the steps of:

receiving in said ATM network node a signaling message with respect to a call from a

calling party (see FIG. 9, User 902; see FIG. 9, step 810, edge node receive a new call; see col.

19, line 19-26; also see FIG. 10, step 1005,1010,1015,1020,1025,1030; see col. 20, line 50-67);

and

identifying in the policy profile database associated with the ATM network node and

based and based on the signaling message, a policy for the calling party (**see col. 17, line 25 to

col. 18, line 45; see col. 14, line 9 to col. 15, line 50; see col. 10, line 10-20; see col. 11, line 1-

16; see col. 13, line 1-6, 29-67; according to a new call, recognizing/identifying a specific

rule/policy in the RSD rule/policy database tables VII-IX**);

the policy profile database (**Tables VII-IX, RSD associated with a database**), the policy

profile database storing entries that relate subscriber to policies (**see col. 14, line 9 to col. 15,

line 50; see col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; RSD stores

contents consists call/connection rules/policies (e.g. features/description includes

connectively information, threshold, quality of service, capacity, and/or status of

loading/congestion), where a call is associated with a user/subscriber since the

user/subscriber is the one making the call/connect**), where each policy defines one more

policy features of a group of policy features with which the related subscriber is associated (**see**

col. 14, line 35-64; each rule/policy defines/describes the descriptions/features of

connectively information, threshold, quality of service, capacity, and/or status of

loading/congestion (i.e. a policy/rule for a quality of service feature/description of a group

of features/descriptions connectively information, threshold, quality of service, capacity,

and/or status of loading/congestion; a policy/rule for loading/congestion feature/description

of a group of features/descriptions connectively information, threshold, quality of service,

capacity, and/or status of loading/congestion) associated with a call/connection for the

user/subscriber)

executing, based on the signaling message, for each policy feature of the one or more

policy features identified by the policy for the calling party (**FIG. 8, step 840; see FIG. 10, steps**

1035,1040; **see col. 17, line 25 to col. 18, line 45; see col. 13, line 1-7, 64 to col. 15, line 50; see**

col. 10, line 10-20; see col. 11, line 1-16; see col. 13, line 1-6, 29-67; according to a new call,

processing/executing in RSD for each status/feature (i.e. connectively information,

threshold, quality of service, capacity, or status of loading/congestion) of a group of

status/feature/priority (i.e. connectively information, threshold, quality of service, capacity,

and status of loading/congestion) identify/recognized by the rule/policy associated with a

call/connection for the user/subscriber);

determining whether a policy condition associated with each policy feature, of the one or

more policy features identified by the policy for the calling party, is satisfied with respect to said

signaling message (**see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64**

to col. 14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively information, threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions));

upon determining that the policy condition associated with each policy feature of one or more policy feature identified by the policy for the calling party is satisfied with respect to said signaling message (see **FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively information, threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions)),**

causing a connection path to be established between the calling party and the call party (see **FIG. 8, step 850, 860, 870; see FIG. 10, steps 1045, 1050, 1055; see col. 14, line 1-65; see col. 19, line 35-50; see col. 21, line 40-50; setting/establishing the call/connection when load/congestion/priority/bandwidth/routes conditions/status (i.e. connectively information, threshold, quality of service, capacity, or status of loading/congestion) are met/fulfilled for each policy/rule status/feature identified/recognized by the user/subscriber policy).**

Although Buyukkoc discloses executing in said policy server for each policy feature of the one or more policy features identified by the policy for the calling party as set forth above,

Buyukkoc does not explicitly disclose "*appropriate service logic*".

However, Gai teaches said policy server (see FIG. 4, policy server 322) being associated with said intercept processor, said policy server being associated with a policy profile database (see FIG. 4, a combined system of database policy rule 414, policy translator, repository 326 and device-specific filtering entity 416), the policy profile database storing entries that relate subscriber to policies (see FIG. 4, stores data related to user policies; see col. 13, line 61 to col. 14, line 5), where each policy defines one more policy features of a group of policy features with which the related subscriber is associated (see FIG. 4, each policy defines rules/policy features for a group of policy features (e.g. source address screening, Destination address screening features) for each user; see col. 14, line 1-15, 56 to col. 15, line 55) where said policy server is to:

determine that a policy in the policy profile database is to be enforced for the calling party (see FIG. 4, determining a policy for the caller/user in the combined database system is to be managed/restricted/enforced for caller user; see col. 13, line 60 and col. 18, line 65);

execute in said policy server appropriate service logic for each policy feature of the one ore more policy feature identified by the policy of the calling party (see FIG. 4, executing/processing specific engine/logic for each policy feature identified by the policy of caller/user; see col. 13, line 60 and col. 18, line 65);

determining, whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied (see FIG. 4, determining if a policy condition/status related/associated with each policy/rule feature

identified/recognized by the policy/rule for the caller/user is accepted/satisfied; see col. 13, line

60 and col. 18, line 65);

a connection path being established when the policy condition for each policy feature, of

the one or more policy features identified by the policy for the calling party is determined to be

satisfied (see FIG. 4, establishing a connection/communication base on determination that

policy/rule status/condition is satisfied/meet for the policy/rule feature identified/recognized by

the policy of the caller/user; see col. 13, line 60 and col. 18, line 65).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "*appropriate service logic*", as taught by Gai in the system of

Buyukkoc, so that it would ability to allocate network services and resources by applying high-

level quality of service policies; see Gai col. 5, line 45-55.

Regarding claims 2, 15, Buyukkoc discloses where said signaling message comprises a

Connect message (see FIG. 8, step 850, a message which contains a route for new call is the

connect message in ATM signaling/SS7; see col. 19, line 19-25, 40-45; see col. 20, line 39-45).

Regarding claims 3, 5, 16, 18, 43 and 45, Buyukkoc discloses where said signaling

message comprises an Add Party or setup message (see FIG. 8, steps 820,830; a message which

contains a new call requesting for a route is the SETUP/adding party message in ATM

signaling/SS7; see col. 19, line 19-31; see col. 20, line 46-52; see col. 20, line 39-45; see col. 21,

line 19-25).

Regarding claim 11, Buyukkoc discloses one ore more policy features, identified by the

policy for the calling party, comprises an aggregated bandwidth limit feature (see col. 17, line

30-40; see col. 13, line 45-47; total bandwidth) and

wherein the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14,

line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy

condition/state (e.g. yellow, Red, and green), associated/related with connectively information,

threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by

the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according

to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service

states/conditions) comprises:

calculating bandwidth for the signaling message (see FIG. 8, step 840; see FIG. 10, steps

1035, 1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40; see col. 21, line

19-30; Table VII, VIII; determining/calculating threshold capacity/bandwidth/Gbps of the

requested new call/connection),

determining whether calculated bandwidth exceeds a requested bandwidth (see FIG. 8,

step 840; see FIG. 10, steps 1035, 1040; see col. 14, line 10-7 to col. 18, line 45; see col. 19, line

25- to see col. 21, line 30; Table VII, VIII; determining/calculating the determined/calculated

threshold capacity/bandwidth/Gbps with threshold capacity/bandwidth/Gbps is higher/exceed the

requested/required capacity/bandwidth/Gbps), and

determining that the condition is satisfied for the aggregate bandwidth limit feature when

the calculated bandwidth is determined to not exceed the requested bandwidth (see col. 14, line

10-7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; Table VII, VIII; ; determining

that the condition/status (i.e. red/yellow) for the total bandwidth feature when the

determined/calculated threshold capacity/bandwidth/Gbps is not higher/exceed the

required/requested capacity/bandwidth/Gbps).

Gai also discloses an aggregated bandwidth limit feature (see col. 4, line 50 to col. 5, line

20; combined bandwidth processing) and

wherein the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 4, determining if a policy condition/status related/associated with each

policy/rule feature identified/recognized by the policy/rule for the caller/user is

accepted/satisfied; see col. 13, line 60 and col. 18, line 65) comprises :

calculating bandwidth for the signaling message (see col. 4, line 50 to col. 5, line 20; see

col. 14, line 1-25; see col. 18, line 45-65; computing/calculating bandwidth for the

demand/request message/data)

determining whether calculated bandwidth exceeds a requested bandwidth (see col. 4,

line 50 to col. 5, line 20; see col. 14, line 1-25; see col. 18, line 45-65; determining/checking

whether calculated/determined bandwidth exceed the SLA bandwidth), and

determining that the condition is satisfied for the aggregate bandwidth limit feature when

the calculated bandwidth is determined to not exceed the requested bandwidth (see col. 4, line 50

to col. 5, line 20; see col. 14, line 1-25; see col. 18, line 45-65; determining/checking whether

traffic condition is met/accepted for the combined bandwidth processing when the

calculated/determined bandwidth is not exceed the request bandwidth (i.e. bandwith within

SLA).

Regarding claims 12, Buyukkoc discloses wherein where said particular one or more

policy features, identified by the policy for the calling party comprises a service class selection

feature (see col. 10, line 50-55; see col. 18, line 26-45; class-of-service) and where the

determining whether a policy condition associated with each policy feature is satisfied (see FIG.

8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19,

line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy condition/state (e.g.

yellow, Red, and green), associated/related with connectively information, threshold, quality of

service, capacity, or status of loading/congestion, identified/recognized by the rule/policy

associated with a call/connection for the user/subscriber is met/fulfilled according to a new

call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service

states/conditions), comprises:

      determining a requested class of service based on the signaling message

(determining/checking a requested/demand class of service based on a new call message; see col.

14, line 1 to col. 18, line 66; see col. 19, line 10-55),

      determining whether the requested class of service is permitted for a customer logical

port with which the calling party is associated (determine/checking if a requested/demand class

of service based is not-block (i.e. permitted) for a ATM virtual link with VPI port number on a

new call; see col. 14, line 1 to col. 18, line 66; see col. 19, line 10-55); and

      determining that the condition is satisfied for the service class selection feature when the

requested class of service is permitted for the customer logical port with which the calling party

is associated (determining/checking the condition/status (i.e. red/green/yellow) is met/satisfied

for class of service when the requested/demand class of service is not-blocked (i.e. permitted) for

a VPI port number on a new party; see col. 14, line 1 to col. 18, line 66; see col. 19, line 10-55).

Gai also discloses a service class selection feature (see col. 3, line 5-60; class/type of service selection/choosing) and where the determining whether a policy condition associated with each policy feature is satisfied (see FIG. 4, determining if a policy condition/status related/associated with each policy/rule feature identified/recognized by the policy/rule for the caller/user is accepted/satisfied; see col. 13, line 60 and col. 18, line 65) comprises:

determining a requested class of service based on the signaling message (determining/calculating a request type/class of service based on request/demand; col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40),

determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated (determining/calculating if the requested/demand class/type of service allowed/permitted for a customer/user logical port/connection (i.e. ATM) with which the caller/subscriber is associated/related; col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40); and

determining that the condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated (determining/checking if the condition/status for traffic is permitted/allow for the logic port with which the called/user is related; see col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40).

Regarding claim 31, the combined system of Buyukkoc and Gai discloses all limitation of claim 31 as set forth in claim 12. Buyukkoc discloses a service class selection feature for specifying a service class with respect to a network port used by said party (see col. 10, line 50-

55; see col. 18, line 26-45; see FIG. 9, trunk/port 932; see col. 20, line 1-10; selecting a class-of-

service for a port/link/trunk/circuit used by the call).

     Regarding claim 42, Buyukkoc discloses wherein said signaling message comprises a

Connect message (see FIG. 8, step 850, a message which contains a route for new call is the

connect message in ATM signaling/SS7; see col. 19, line 19-25, 40-45; see col. 20, line 39-45).

     Regarding claim 58, the combined system of Buyukkoc and Gai discloses all limitations

as set forth in claim 12. Buyukkoc further discloses a service class selection feature for

specifying a service class with respect to a network port used by said party (see col. 10, line 50-

55; see col. 18, line 26-45; see FIG. 9, trunk/port 932; see col. 20, line 1-10; selecting a class-of-

service for a port/link/trunk/circuit used by the call).

13.   Claim 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkoc

in view of Gai and further in view of Noake (US006751222B1).

     Regarding claims 4 and 17, neither Buyukkoc nor Gai does not explicitly disclose a

release message see FIG. 4, determining if a policy condition/status related/associated with each

policy/rule feature identified/recognized by the policy/rule for the caller/user is

accepted/satisfied; see col. 13, line 60 and col. 18, line 65).

     However, a release message is well know in the ATM signaling/SS7 in order to

disconnect the call.

     In particular, Noake teaches a release message (see FIG. 4, RELEASE message; see col.

8, line 9-39).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide a release message, as taught by Noake in the combined

system of Buyukkoc and Gai, so that it would make effective use of a band and the respective

apparatus by transmitting connection information, and by sending/receiving a release message it

will notify to stop the cell assembling and disassembling processes; see Noake col. 2, line 55-64;

col. 8, line 19-24.

14.   Claims 6, 8, 9,19-21, 23-26, 46-48 and 50 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Buyukkoc in view of Gai, and further in view of Christie'656

(US006690656B1).

   Regarding claims 6, 8, and 9, Buyukkoc discloses where said particular one or more

policy features, identified by the policy for the calling party, comprises a address validation

feature and where the determining whether a policy condition associated with each policy feature

is satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col.

14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively

information, threshold, quality of service, capacity, or status of loading/congestion,

identified/recognized by the rule/policy associated with a call/connection for the user/subscriber

is met/fulfilled according to a new call/connection (i.e. load/congestion/priority

/bandwidth/routes/quality-of-service states/conditions) comprises

determining whether an address associated with the calling party (see col. 3, line 5-65;

see col. 7, line 50 to col. 16, line 65; determining/checking the call/connection of

user/subscriber), and

determining that the condition is satisfied for the address validation feature (see col. 3,

line 5-65; see col. 7, line 50 to col. 16, line 65; determining that status/condition (i.e. green,

yellow, red) is met/satisfied for the address checking/verification).

Gai discloses disclose a address validation/screening and address screening herein

where said particular one or more policy features, identified by the policy for the calling party,

comprises address validation feature and where the determining whether a policy condition

associated with each policy feature is satisfied comprises: determining whether an address

associated with the calling party, and determining that the condition is satisfied for the address

validation feature when the address, associated with the calling party (see FIG. 4- 6, and 7A; see

col. 9, line 58 to col. 20, line 30).

Neither Buyukkoc nor Gai explicitly disclose *"within a range of authorized addresses",*

"when the address, associated with the calling party, is determined to be within the range of

authorized addresses".

However, a source address validation/screening is well known in the ATM signaling/SS7.

In particular, Christie'656 teaches a source address validation/screening and a destination

address screening herein where said particular one or more policy features, identified by the

policy for the calling party, comprises a source address validation feature (see FIG. 7, step 720,

720, 730; policy/rule validation/verification identify the caller is the caller (source) and called

(destination) addresses/number/IDs validation; see col. 7, line 5-55; see col. 15, line 30-60) and

determining whether an address associated with the calling party is within a range of authorized addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining whether the caller address with within a range of authorized numbers/IDs/ANIs; note that a group or IDs/numbers/addresses/ANIs stored in the access table is within an accessible range), and

determining that the condition is satisfied for the source address validation feature when the address, associated with the calling party, is determined to be within the range of authorized addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining the status/condition is met/accepted/satisfied for the caller ID/number/addresses/ANI associated with the caller is determined to be within range of authorized numbers/IDs/ANIs; note that a group or IDs/numbers/addresses/ANIs stored in the access table is within an accessible range).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to "*within a range of authorized addresses", "when the address, associated with the calling party, is determined to be within the range of authorized addresses*"., as taught by Christie'656 in the combined system of Buyukkoc and Gai, so that it would can validate the calls and generate a billing record; see Christie'656 col. 3, line 12-22; col. 7, line 39-45.

Regarding claim 19, the combination of Buyukkoc, Gai and Christie'656 discloses all claimed limitations as set forth in claims 6, 8 and 9 above. Buyukkoc discloses accessing said ATM network through a particular network port associated with said CPE (see FIG. 9, accessing Switch 922 through the trunk/port 932; see col. 20, line 1-10). Christie'656 teaches a source address validation for ensuring that said party is an authorized party for accessing the ATM

network (see FIG. 7; see col. 7, line 9-19, 35-45; checking/validating caller number in ANI for
verification for accessing ATM network).

     Regarding claim 20, Buyukkoc discloses wherein said particular network port is a
Customer Logical Port (see col. 4, line 20-40; see col. 5, line 20-26; edge node/switch provides
logical connection/port (e.g. VPI port) between customer and the network). Christie'656 also
discloses a Customer Logical Port (see col. 4, line 35-40; 60-67; a logical/virtual port/link).

     Regarding claim 21, Buyukkoc discloses wherein said particular network port is a full
physical port (see FIG. 9, physical trunk/port 932; see col. 20, line 1-10).

     Regarding claim 23 and 50, Buyukkoc discloses where said particular one or more
policy features, identified by the policy for the calling party, comprises a address validation
feature and where the determining whether a policy condition associated with each policy feature
is satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col.
14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether
rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively
information, threshold, quality of service, capacity, or status of loading/congestion,
identified/recognized by the rule/policy associated with a call/connection for the user/subscriber
is met/fulfilled according to a new call/connection (i.e. load/congestion/priority
/bandwidth/routes/quality-of-service states/conditions) comprises

     determining whether an address associated with the calling party (see col. 3, line 5-65;
see col. 7, line 50 to col. 16, line 65; determining/checking the call/connection of
user/subscriber), and

determining that the condition is satisfied for the address validation feature (see col. 3, line 5-65; see col. 7, line 50 to col. 16, line 65; determining that status/condition (i.e. green, yellow, red) is met/satisfied for the address checking/verification).

Gai discloses disclose a address validation/screening and address screening herein where said particular one or more policy features, identified by the policy for the calling party, comprises address validation feature and where the determining whether a policy condition associated with each policy feature is satisfied comprises: determining whether an address associated with the calling party, and determining that the condition is satisfied for the address validation feature when the address, associated with the calling party (see FIG. 4- 6, and 7A; see col. 9, line 58 to col. 20, line 30).

Neither Buyukkoc nor Gai explicitly disclose "*within a range of authorized addresses*", "*when the address, associated with the calling party, is determined to be within the range of authorized addresses*".

However, a destination address validation/screening is well known in the ATM signaling/SS7.

In particular, Christie'656 teaches a destination address validation/screening and a destination address screening herein where said particular one or more policy features, identified by the policy for the called party, comprises a destination address validation feature (see FIG. 7, step 720, 720, 730; policy/rule validation/verification identify the called (destination) addresses/number/IDs validation; see col. 7, line 5-55; see col. 15, line 30-60) and

determining whether destination address associated with the called party is within a range of authorized addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining whether the

called address with within a range of authorized numbers/IDs/ANIs; note that a group or

IDs/numbers/addresses/ANIs stored in the access table is within an accessible range), and

determining that the condition is satisfied for the destination address validation feature

when the address, associated with the called party, is determined to be within the range of

authorized addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining the

status/condition is met/accepted/satisfied for the called ID/number/addresses/ANI is determined

to be within range of authorized numbers/IDs/ANIs; note that a group or

IDs/numbers/addresses/ANIs stored in the access table is within an accessible range).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to "*within a range of authorized addresses", "when the address,*

associated with the calling party, is determined to be within the range of authorized addresses".,

as taught by Christie'656 in the combined system of Buyukkoc and Gai, so that it would can

validate the calls and generate a billing record; see Christie'656 col. 3, line 12-22; col. 7, line 39-

45.

Buyukkoc does not explicitly disclose a destination address screening for defining a

plurality of address to which said party can effectuate said call. However, a destination

address/number validation/screening for defining a plurality of address/numbers to which said

party can effectuate said call is well known in the signaling with SCP. In particular, Christie'656

teaches a destination address screening for defining a plurality of address to which said party can

effectuate said call (see FIG. 7; see col. 7, line 9-19, 35-45; see col. 15, line 40-60; see col. 2,

line 1-15; verifying a dial number from the list of numbers where the call needs to be connected).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to validate/verify dial number from the list of number to establish the call, as taught by Christie'656 in the system of Buyukkoc, so that it would can validate the calls and generate a billing record; see Christie'656 col. 3, line 12-22; col. 7, line 39-45.

Regarding claim 24, the combined of Buyukkoc, Gai and Christie'656 discloses destination address screening feature is established for a subscriber to which said calling party belongs as set forth above in claim 23.

Neither Buyukkoc nor Christie'656 explicitly discloses "*a group of subscribers*". However, Gai teaches a policy server (see FIG. 4, policy server 322) comprising the particular policy feature (see FIG. 4, Policy Rule generation engine 414, policy translator 410, and device-specific filtering entity; see col. 13, line 61 to col. 14, line 5) including at least one of a destination screening feature for a group of subscribers to which the party belongs (see col. 14, line 1-15, 56 to col. 15, line 55; applying destination addressing policy rule to a group of users (see FIG. 7A, marking users, admin users, executive users, etc.) where a specific user (see FIG. 7A, John Doe) belongs; see col. see col. 14, line 10-18).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "*a group of subscribers*", as taught by Gai in the combined system of Buyukkoc and Christie'565, so that it would ability to allocate network services and resources by applying high-level quality of service policies; see Gai col. 5, line 45-55.

Regarding claims 25, Buyukkoc discloses wherein the ATM network further comprises: the policy server to: identify a policy for the called party, the policy for the called party, the policy of the called party include address screening feature as set forth above in claim 14. Buyukkoc further determine whether a

wherein the determining whether a policy condition associated with each address

screening feature is satisfied with respect to signaling message, where, when determining

whether the policy condition associated with the source address screening feature is satisfied,(see

FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14, line 67; see

col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy

condition/state (e.g. yellow, Red, and green), associated/related with addressing

identified/recognized by the rule/policy associated with a call/connection for the user/subscriber

is met/fulfilled according to a new call/connection): the policy server is to

determining whether an address associated with the calling party (see col. 3, line 5-65;

see col. 7, line 50 to col. 16, line 65; determining/checking the call/connection of

user/subscriber), and

determining that the condition is satisfied for the address validation feature (see col. 3,

line 5-65; see col. 7, line 50 to col. 16, line 65; determining that status/condition (i.e. green,

yellow, red) is met/satisfied for the address checking/verification);

where the connection path is established based on whether the condition is satisfied for

the source address screening feature (see FIG. 8, step 850, 860, 870; see FIG. 10, steps 1045,

1050, 1055; see col. 14, line 1-65; see col. 19, line 35-50; see col. 21, line 40-50;

setting/establishing the call/connection when conditions/status address checking/verification is

met/fulfilled).

Gai discloses disclose a address validation/screening and address screening herein

where said particular one or more policy features, identified by the policy for the calling party,

comprises address validation feature and where the determining whether a policy condition

associated with each policy feature is satisfied comprises: determining whether an address

associated with the calling party, and determining that the condition is satisfied for the address

validation feature when the address, associated with the calling party (see FIG. 4- 6, and 7A; see

col. 9, line 58 to col. 20, line 30).

Neither Buyukkoc nor Gai explicitly disclose "*a second policy server*", "*within a range*

of authorized addresses", "the address, associated with the calling party, is determined to

be within the range of authorized addresses".

However, a source address validation/screening is well known in the ATM signaling/SS7.

In particular, Christie'656 teaches a second policy server (see FIG. 10, second

call/connection manager (CCM) 1115/1120); see col. 20, line 25 to col. 21, line 60) to: a source

address validation/screening and a destination address screening herein where said particular one

or more policy features, identified by the policy for the calling party, comprises a source address

validation feature (see FIG. 7, step 720, 720, 730; policy/rule validation/verification identify the

caller is the caller (source) and called (destination) addresses/number/IDs validation; see col. 7,

line 5-55; see col. 15, line 30-60) and

determining whether an address associated with the calling party is within a range of

authorized plurality of addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining

whether the caller address with within a range of authorized numbers/IDs/ANIs; note that a

group or IDs/numbers/addresses/ANIs stored in the access table is within an accessible range),

and

determining that the condition is satisfied for the source address validation feature when

the address, associated with the calling party, is determined to be within the range of authorized

plurality of addresses (see col. 7, line 5-55; see col. 15, line 30-60; determining the

status/condition is met/accepted/satisfied for the caller ID/number/addresses/ANI associated with

the caller is determined to be within range of authorized numbers/IDs/ANIs; note that a group or

IDs/numbers/addresses/ANIs stored in the access table is within an accessible range).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "a *second policy server*", "*within a range of authorized*

plurality of *addresses*", "*when the address, associated with the calling party, is determined to be

within the range of authorized* plurality of *addresses*", as taught by Christie'656 in the combined

system of Buyukkoc and Gai, so that it would can validate the calls and generate a billing record;

see Christie'656 col. 3, line 12-22; col. 7, line 39-45.

Regarding claim 26, the combined of Buyukkoc, Gai and Christie'656 discloses source

address screening feature is established for a subscriber to which said party belongs as set forth

above in claim 25.

Neither Buyukkoc nor Christie'656 explicitly discloses "*a group of subscribers*".

However, Gai teaches a policy server (see FIG. 4, policy server 322) comprising the particular

policy feature (see FIG. 4, Policy Rule generation engine 414, policy translator 410, and device-

specific filtering entity; see col. 13, line 61 to col. 14, line 5) including at least one of a

destination screening feature for a group of subscribers to which the party belongs (see col. 14,

line 1-15, 56 to col. 15, line 55; applying destination addressing policy rule to a group of users

(see FIG. 7A, marking users, admin users, executive users, etc.) where a specific user (see FIG.

7A, John Doe) belongs; see col. see col. 14, line 10-18).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "*a group of subscribers*", as taught by Gai in the combined

system of Buyukkoc and Christie'565, so that it would ability to allocate network services and

resources by applying high-level quality of service policies; see Gai col. 5, line 45-55.

Regarding claim 46, the combined system of Buyukkoc, Gai and Christie'656 discloses

all claimed limitations as set forth in claim 19. Buyukkoc discloses accessing said ATM network

through a particular network port associated with said CPE (see FIG. 9, accessing Switch 922

through the trunk/port 932; see col. 20, line 1-10).

Regarding claim 47, Buyukkoc discloses wherein said particular network port is a

Customer Logical Port (see col. 4, line 20-40; see col. 5, line 20-26; edge node/switch provides

logical connection/port between customer and the network). Christie'656 also discloses a

Customer Logical Port (see col. 4, line 35-40; 60-67; a logical/virtual port/link).

Regarding claim 48, Buyukkoc discloses wherein said particular network port is a full

physical port (see FIG. 9, physical trunk/port 932; see col. 20, line 1-10).

15.   Claims 7, 22 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buyukkoc in view of Gai and further in view of Farris (US006154445A).

Regarding claim 7, Buyukkoc discloses wherein where said particular one or more

policy features, identified by the policy for the calling party comprises a call feature (see col. 10,

line 50-55; see col. 18, line 26-45; call/connection type feature) and where the determining

whether a policy condition associated with each policy feature is satisfied (see FIG. 8, step 840;

see FIG. 10, steps 1035, 1040; col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40;

see col. 21, line 19-30; determines/decides whether rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively information, threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service states/conditions), comprises:

determining whether the signaling message result for a customer logical port with which the calling party is associated (determine/checking if a requested/demand class of service based is not-block (i.e. permitted) for a ATM virtual link with VPI port number on a new call; see col. 14, line 1 to col. 18, line 66; see col. 19, line 10-55); and

determining that the condition is satisfied for the call feature when the requested the signaling message does not result for the customer logical port with which the calling party is associated (determining/checking the condition/status (i.e. red/green/yellow) is met/satisfied for type of call when the requested/demand call type is not-blocked (i.e. permitted) for a VPI port number on a new party; see col. 14, line 1 to col. 18, line 66; see col. 19, line 10-55).

Gai also discloses call feature (see col. 3, line 5-60; class/type of service selection/choosing) and where the determining whether a policy condition associated with each policy feature is satisfied (see FIG. 4, determining if a policy condition/status related/associated with each policy/rule feature identified/recognized by the policy/rule for the caller/user is accepted/satisfied; see col. 13, line 60 and col. 18, line 65) comprises:

determining call type feature based on the signaling message (determining/calculating a request call type based on request/demand; col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40),

determining whether the requested call type feature is permitted for a customer logical port with which the calling party is associated (determining/calculating if the requested/demand call type allowed/permitted for a customer/user logical port/connection (i.e. ATM) with which the caller/subscriber is associated/related; col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40); and

determining that the condition is satisfied for the call type feature when the requested call type feature does not result for the customer logical port with which the calling party is associated (determining/checking if the condition/status for traffic is permitted/allow for the logic port with which the called/user is related; see col. 3, line 5-65; see col. 5, line 5-45; see col. 11, line 1 to col. 12, line 40).

Neither Buyukkoc nor Gai explicitly disclose "a maximum call attempt rate limit."

However, having a maximum call attempt rate limit/threshold is well known in the signaling/SS7. In particular, Farris teaches a maximum call attempt rate limit (see col. 14, line 1-12; see col. 11, line 5-17; acceptable/maximum specified rate of call attempts).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide "acceptable/maximum specified rate of call attempts", as taught by Farris in the combined system of Buyukkoc and Gai, so that it would can detect the predetermined events and/or imminence of predetermined events, and then blocking or controlling those events from their incipiency; see Farris col. 14, line 1-6.

Regarding claim 22, the combined system of Buyukkoc, Gai and Farris discloses all claimed limitation as set forth in claim 7. Buyukkoc discloses the number of setup messages (see FIG. 8, steps 820,830; a message which contains a new call requesting for a route is the

SETUP/adding party message in ATM signaling/SS7; see col. 19, line 19-31; see col. 20, line

46-52; see col. 20, line 39-45; see col. 21, line 19-25). Buyukkoc discloses the number of setup

messages as described above in claim 18.

  Regarding claim 49, the combined system of Buyukkoc, Gai and Farris discloses all

claimed limitation as set forth in claim 22. Buyukkoc discloses the number of setup messages

(see FIG. 8, steps 820,830; a message which contains a new call requesting for a route is the

SETUP/adding party message in ATM signaling/SS7; see col. 19, line 19-31; see col. 20, line

46-52; see col. 20, line 39-45; see col. 21, line 19-25).

16. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkoc in

view of Gai and VanDervort (US005761191A), or Horn (US005276676A).

  Regarding claim 10, Buyukkoc discloses wherein where said particular one or more

policy features, identified by the policy for the calling party, comprises a maximum size limit

(see col. 14, line 15-65; acceptable/maximum load/size/bandwidth before the call are blocked)

and where the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14,

line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy

condition/state (e.g. yellow, Red, and green), associated/related with connectively information,

threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by

the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according

to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service

states/conditions) comprises:

determining whether a size in the signaling message exceeds a limit (see col. 14, line 10-7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; determining/checking if the acceptable size/load/capacity in the new call exceed threshold) , and

determining that the condition is satisfied for the maximum size limit feature when the size does not exceed the limit (see col. 14, line 10-7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; determining the condition/status (e.g. red, yellow, green) is met/satisfied for the acceptable/maximum load/size/bandwidth when it does not exceed threshold).

Gai also discloses wherein where said particular one or more policy features, identified by the policy for the calling party, comprises a maximum size limit and where the determining whether a policy condition associated with each policy feature is satisfied comprises: determining whether a burst size in the signaling message exceeds a limit, and determining that the condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit (see FIG. 4- 6, and 7A; see col. 9, line 58 to col. 20, line 30).

Neither Buyukkoc nor Gai explicitly disclose "*burst*".

However, ATM network having a rule/policy/policing attribute burst size threshold/limiting for ATM flow control is well known in the art.

In particular, VanDervort teaches a maximum burst size limit/threshold feature; determining whether a burst size in the signaling message exceeds a limit, and determining that the condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit (see col. 6, line 8-11; limited/maximum burst size limit/threshold of user cell transmission for policing).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "burst", as taught by VanDervort in the combined system of

Buyukkoc and Gai, so that it would control the flow of traffic and maximize the utilization of

network resources; see VanDervort col. 6, line 1-3.

In particular, Horn teaches a maximum burst size limit/threshold feature and determining

that the condition is satisfied for the maximum burst size limit feature when the burst size does

not exceed the limit (see col. 2, line 29-30; maximum burst length is limited by threshold).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "burst", as taught by Horn in the combined system of

Buyukkoc and Gai, so that it would avoid overflow problem due to long bursts; see Horn col. 1,

line 25-34.

17.   Claims 13, 38, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buyukkoc in view of Gai and Basso (US006633539B1).

Regarding claims 13 and 38, Buyukkoc discloses one ore more policy features,

identified by the policy for the calling party, comprises an maximum call limit feature (see col.

17, line 30-40; see col. 13, line 45-47; see col. 14, line 15-65; acceptable/maximum call

load/limit/bandwidth) and

wherein the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14,

line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy

condition/state (e.g. yellow, Red, and green), associated/related with connectively information,

threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by

the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according

to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service

states/conditions) comprises:

      determining whether maximum call limit, if a call is established between the calling party

and called party, exceeds a requested bandwidth (see FIG. 8, step 840; see FIG. 10, steps 1035,

1040; see col. 14, line 10-7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; Table

VII, VIII; determining/calculating call load/limit/bandwidth is higher/exceed the

requested/required maximum/acceptable load/limit/bandwidth), and

      determining that the condition is satisfied for the maximum call limit feature when the

call does not exceed maximum call of calls (see col. 14, line 10-7 to col. 18, line 45; see col. 19,

line 25- to see col. 21, line 30; Table VII, VIII; determining that the condition/status (i.e.

red/yellow) for the acceptable/maximum call load/limit/bandwidth when the call is not

higher/exceed the accepted/maximum calls).

      Gai also discloses maximum call limit feature (see col. 4, line 50 to col. 5, line 20;

combined bandwidth processing) and wherein the determining whether a policy condition

associated with each policy feature is satisfied (see FIG. 4, determining if a policy

condition/status related/associated with each policy/rule feature identified/recognized by the

policy/rule for the caller/user is accepted/satisfied; see col. 13, line 60 and col. 18, line 65)

comprises: determining whether maximum call limit, if a call is established between the calling

party and called party, exceeds a requested bandwidth determining that the condition is satisfied

for the maximum call limit feature when the call does not exceed maximum call of calls (see col.
4, line 50 to col. 5, line 20; see col. 14, line 1-25; see col. 18, line 45-65).

Neither Buyukkoc nor Gai explicitly disclose "*concurrent*".

However, ATM network having a maximum concurrent call limit/threshed for call
admission control (CAC) is well known in the art. In particular, Basso teaches a maximum
concurrent call limit feature (see col. 4, line 25-35; maximum allowed/limit number of
concurrent connection/call).

Therefore, it would have been obvious to one having ordinary skill in the art at the time
the invention was made to provide "*concurrent*", as taught by Basso in the combined system of
Buyukkoc and Gai, so that it would control concurrent connections/calls to provide efficient
protection against signaling congestion; see Basso col. 2, line 35-45.

Regarding claim 38, the combined system of Buyukkoc, Gai and Basso discloses all
claimed limitation as set forth in claim 13 above. Buyukkoc discloses a policy feature comprise a
maximum call limit feature for specifying the total number of calls allowed concurrently with
respect to a network port used by said party (see col. 14, line 10 to col. 15, line 50; see FIG. 9,
trunk/port 932; see col. 20, line 1-10; acceptable/allowable total number of calls threshold/limit
for a trunk/port).

Regarding claim 65, the combined system of Buyukkoc, Gai and Basso discloses all
claimed limitation as set forth in claim 38 above.

18.   Claims 27-29 and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Buyukkoc and Gai, in view of Kobayashi (US 5,896,371).

Regarding claims 27, Buyukkoc discloses wherein where said particular one or more

policy features, identified by the policy for the calling party, comprises a maximum size limit

(see col. 14, line 15-65; acceptable/maximum load/size/bandwidth before the call are blocked)

and where the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col. 14,

line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether rule/policy

condition/state (e.g. yellow, Red, and green), associated/related with connectively information,

threshold, quality of service, capacity, or status of loading/congestion, identified/recognized by

the rule/policy associated with a call/connection for the user/subscriber is met/fulfilled according

to a new call/connection (i.e. load/congestion/priority /bandwidth/routes/quality-of-service

states/conditions) comprises:

determining whether a size in the signaling message exceeds a limit (see col. 14, line 10-

7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; determining/checking if the

acceptable size/load/capacity in the new call exceed threshold) , and

determining that the condition is satisfied for the maximum size limit feature when the

size does not exceed the limit (see col. 14, line 10-7 to col. 18, line 45; see col. 19, line 25- to see

col. 21, line 30; determining the condition/status (e.g. red, yellow, green) is met/satisfied for the

acceptable/maximum load/size/bandwidth when it does not exceed threshold).

Gai also discloses wherein where said particular one or more policy features, identified

by the policy for the calling party, comprises a maximum size limit and where the determining

whether a policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in the signaling message exceeds a limit, and determining that

the condition is satisfied for the maximum burst size limit feature when the burst size does not

exceed the limit (see FIG. 4- 6, and 7A; see col. 9, line 58 to col. 20, line 30).

Neither Buyukkoc nor Gai explicitly disclose "*burst-sized request*".

However, limiting a burst-size request is well known in the art of ATM. In particular,

Kobayashi teaches a maximum burst size limit feature for limiting a burst-size request associated

with said call (see FIG. 6; see col. 12, line 55 to col. 13, line 35; a limiting/setting/changing the

number of cells transmitted in each call).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide "*burst-sized request*", as taught by Kobayashi in the

combined system of Buyukkoc and Gai, so that it would provide a flow control performed

cooperatively by the network and the terminal equipment and call accepted control is simplified;

see Kobayashi col. 7, line 46-52; col. 8, line 40-45.

Regarding claim 28, the combined system of Buyukkoc, Gai and Kobayashi discloses all

claimed limitations. Kobayashi discloses the number of packets per second allowed to be

transmitted to said ATM network with respect to said call (see FIG. 6; see col. 12, line 55 to col.

13, line 35; a number of cells per second (i.e. 10Mbps) requested to transmit in each call to ATM

network). Therefore, it would have been obvious to one having ordinary skill in the art at the

time the invention was made to provide the number of packets per second requested to be

transmitted, as taught by Kobayashi in the combined system of Buyukkoc and Gai, for the same

motivation as above in claim 27.

Regarding claim 29, the combined system of Buyukkoc, Gai and Kobayashi discloses all

claimed limitations. Kobayashi discloses the number of packets per second allowed to be

received by said party from said ATM network with respect to said call (see FIG. 6; see col. 12, line 55 to col. 13, line 35; a number of cells per second (i.e. 10Mbps) requested to received in each call from ATM network). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the number of packets per second requested to be received, as taught by Kobayashi in the combined system of Buyukkoc and Gai, for the same motivation as above in claim 27.

Regarding claim 54, the combined system of Buyukkoc, Gai and Kobayashi discloses all claimed limitations as set forth in claim 27 above.

Regarding claim 55, Kobayashi discloses the number of packets per second allowed to be transmitted to said ATM network with respect to said call (see FIG. 6; see col. 12, line 55 to col. 13, line 35; a number of cells per second (i.e. 10Mbps) requested to transmit in each call to ATM network). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the number of packets per second requested to be transmitted, as taught by Kobayashi in the combined system of Buyukkoc and Gai, for the same motivation as above in claim 27.

Regarding claim 56, Kobayashi discloses the number of packets per second allowed to be received by said party from said ATM network with respect to said call (see FIG. 6; see col. 12, line 55 to col. 13, line 35; a number of cells per second (i.e. 10Mbps) requested to received in each call from ATM network). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the number of packets per second requested to be received, as taught by Kobayashi in the combined system of Buyukkoc and Gai, for the same motivation as above in claim 27.

19.   Claim 30 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buyukkoc in view of Gai and Smith (US006222823B1).

   Regarding claim 30, Buyukkoc discloses one ore more policy features, identified by the

policy for the calling party, comprises an aggregated bandwidth limit feature for a particular

network port by said calling party (see col. 17, line 30-40; see col. 13, line 45-47; total

bandwidth; (see FIG. 9, physical trunk/port 932; see col. 20, line 1-10; col. 17, line 30-40; see

col. 13, line 45-47; total bandwidth for the port/link)

   Where, when determining whether a policy condition associated with each policy feature

is satisfied (see FIG. 8, step 840; see FIG. 10, steps 1035, 1040; see col. 13, line 1-7; 64 to col.

14, line 67; see col. 19, line 25-40; see col. 21, line 19-30; determines/decides whether

rule/policy condition/state (e.g. yellow, Red, and green), associated/related with connectively

information, threshold, quality of service, capacity, or status of loading/congestion,

identified/recognized by the rule/policy associated with a call/connection for the user/subscriber

is met/fulfilled according to a new call/connection (i.e. load/congestion/priority

/bandwidth/routes/quality-of-service states/conditions) the policy server is to:

   calculate bandwidth for the signaling message (see FIG. 8, step 840; see FIG. 10, steps

1035, 1040; see col. 13, line 1-7; 64 to col. 14, line 67; see col. 19, line 25-40; see col. 21, line

19-30; Table VII, VIII; determining/calculating threshold capacity/bandwidth/Gbps of the

requested new call/connection),

   determine whether calculated bandwidth exceeds a requested bandwidth (see FIG. 8, step

840; see FIG. 10, steps 1035, 1040; see col. 14, line 10-7 to col. 18, line 45; see col. 19, line 25-

to see col. 21, line 30; Table VII, VIII; determining/calculating the determined/calculated

threshold capacity/bandwidth/Gbps with threshold capacity/bandwidth/Gbps is higher/exceed the

requested/required capacity/bandwidth/Gbps), and

   determine that the condition is satisfied for the aggregate bandwidth limit feature when

the calculated bandwidth is determined to not exceed the requested bandwidth (see col. 14, line

10-7 to col. 18, line 45; see col. 19, line 25- to see col. 21, line 30; Table VII, VIII; ; determining

that the condition/status (i.e. red/yellow) for the total bandwidth feature when the

determined/calculated threshold capacity/bandwidth/Gbps is not higher/exceed the

required/requested capacity/bandwidth/Gbps).

   Gai also discloses an aggregated bandwidth limit feature (see col. 4, line 50 to col. 5, line

20; combined bandwidth processing) and

   wherein the determining whether a policy condition associated with each policy feature is

satisfied (see FIG. 4, determining if a policy condition/status related/associated with each

policy/rule feature identified/recognized by the policy/rule for the caller/user is

accepted/satisfied; see col. 13, line 60 and col. 18, line 65) comprises :

   calculating bandwidth for the signaling message (see col. 4, line 50 to col. 5, line 20; see

col. 14, line 1-25; see col. 18, line 45-65; computing/calculating bandwidth for the

demand/request message/data)

   determining whether calculated bandwidth exceeds a requested bandwidth (see col. 4,

line 50 to col. 5, line 20; see col. 14, line 1-25; see col. 18, line 45-65; determining/checking

whether calculated/determined bandwidth exceed the SLA bandwidth), and

determining that the condition is satisfied for the aggregate bandwidth limit feature when

the calculated bandwidth is determined to not exceed the requested bandwidth (see col. 4, line 50

to col. 5, line 20; see col. 14, line 1-25; see col. 18, line 45-65; determining/checking whether

traffic condition is met/accepted for the combined bandwidth processing when the

calculated/determined bandwidth is not exceed the request bandwidth (i.e. bandwith within

SLA).

Neither Buyukkoc nor Gai explicitly disclose "*authorized for use*".

However, determining the maximum bandwidth allowable for a particular port authorized

for use by said party is well known in the art of ATM. In particular, Smith teaches determining

the maximum bandwidth allowable for a particular port authorized for use by said party (see

FIG. 1-2; see col. 9, line 5-45, and abstract; determining predetermined/allowable/authorized

bandwidth for a particular port/connection of end station).

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to determining predetermined/allowable/authorized bandwidth for a

particular port/connection of end station, as taught by Smith in the combined system of

Buyukkoc and Gai, so that it would cause the system control means to allocate a predetermined

bandwidth and balance the bandwidth; see Smith col. 2, line 35-67; col. 9, line 21-25.

Regarding claim 57, the combined system of Buyukkoc, Gai and Smith discloses all

claimed limitations as set forth in claim 30 above.

20.   Claims 32-37 and 59-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Buyukkoc in view of Gai and Kilkki (US006041039A).

     Regarding claims 32-37, the combined system of Buyukkoc and Gai discloses service

class as described above in claim 31 and 58. Buyukkoc further discloses constant bit rate service

(CBR) and variable bit rate service (VBR) (see col. 1, line 50-60).

     Neither Buyukkoc nor Gai explicitly disclose *"real-time VBR service, non-real time*

VBR, unspecified bit-rate (UBR), and available bit-rate (ABR)".

     However, the ATM class of services a real-time VBR service, non-real time VBR,

unspecified bit-rate (UBR), and available bit-rate (ABR) is well known in ATM standard. In

particular, Kilkki teaches CBR, VBR, a real-time VBR service, non-real time VBR, unspecified

bit-rate (UBR), and available bit-rate (ABR) (see col. 1, line 54-67).

     Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide quality of service class defined by ATM standard, as taught

by Kilkki in the combined system of Buyukkoc and Gai, so that it would provide a capability to

manage increases in network load, supporting both real-time and non-real time application, and

offering, in certain circumstances, a guaranteed level service quality; see Kilkki col. 1, line 44-

53, also by using the ATM standard services, it will enable the service provider to interoperate

between multi-vendor networks.

     Regarding claims 59-64, the combined system of Buyukkoc, Gai and Smith discloses all

claimed limitations as set forth in claims 32-37 above.

21.   Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buyukkoc in

view of Gai, and further in view of Noake (US006751222B1).

Regarding claim 44, neither Buyukkoc nor Gai explicitly disclose a release message. However, a release message is well know in the ATM signaling/SS7 in order to disconnect the call. In particular, Noake teaches a release message (see FIG. 4, RELEASE message; see col. 8, line 9-39). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a release message, as taught by Noake in the combined system of Buyukkoc and Gai, so that it would make effective use of a band and the respective apparatus by transmitting connection information, and by sending/receiving a release message it will notify to stop the cell assembling and disassembling processes; see Noake col. 2, line 55-64; col. 8, line 19-24.

Conclusion

22.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN N. MOORE whose telephone number is (571)272-3085. The examiner can normally be reached on 7:30 AM- 4:00 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick W. Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ian N. Moore
Primary Examiner
Art Unit 2463

/Ian N. Moore/
Primary Examiner, Art Unit 2463